

MENASCO MANUFACTURING COMPANY

MODELS: Menasco Pirate C4, D4, Super Pirate D4-87

T.C. NUMBER: T.C. 67

Model	Pirate C4	Pirate D4	Super Pirate D4-87
Type	4LAI - Direct drive	----	----
Rating:			
Maximum continuous, hp, rpm, at S. L. pressure altitude	125-2175-S.L.	----	----
Take-off, hp, rpm, at full throttle	125-2175	----	----
Fuel (minimum octane aviation gasoline)	73	----	80
Bore and stroke, in.	4.75 x 5.12	----	----
Displacement, cu. in.	363	----	----
Compression ratio	5.8: 1	5.5: 1	6: 1
Weight (dry), lbs.	300	311	310
C. G. location (dry)			
Forward of rear mount C.L., in.	10	----	----
Below propeller shaft C.L., in.	7.2	----	----
Propeller shaft, SAE No.	10	----	----
Carburetion	Stromberg downdraft NA-R4D carburetor with 1-7/16 in. venturi	Stromberg updraft NA-R5 carburetor with 1-13/16 in. venturi or Stromberg downdraft with 1-7/16 in.	Stromberg downdraft NAR-4D carburetor with 1-7/16 in. venturi
Ignition	Scintilla PA-4D-F1, Bosch FU4, S88, JF4-ARS12, or Bendix Scintilla SF-4R-1 or Eisemann LA-4 magnetos	----	Bendix Scintilla SF4R-9
Ignition timing, degrees BTC	30 L (full advance) 35 R	30 Both	----
Spark plugs	BG 417 or 5B1	BG 323 or LU-489	BG-LU-489
NOTES	1, 4	1, 2, 5	1, 3, 5
Certification basis	Type Certificate No. 67		

NOTE 1. Maximum permissible cylinder head, barrel and oil inlet temperature, 550 degrees F., 300 degrees F., and 200 degrees F., respectively.

NOTE 2. The following accessory provisions and typical engine accessories are eligible at the indicated weight increase:

Starter - Eclipse Y-150	23
Generator - Eclipse G-1 or LY-180 (no provision on early C4 and D4 engines)	17
Fuel pump (use SAE rotary type) - approximately	4
Oil filter - Purolater Type PEA-1/2 (Part No. 5654)	3
Air cleaner - (Part No. 5656)	4

NOTE 3. Models D4 and D4-87 incorporate improved cylinder heads and automatic valve gear lubrication. The D4-87 engines also incorporate steel connective rods and larger piston pins.

NOTE 4. The approval for Model C4 expired 3/25/43. No C4 engines manufactured after this date or with serial numbers above 500 are eligible for use in certificated aircraft.

NOTE 5. The approval for models D4 and D4-87 expired on 2/13/47. No engines of these models manufactured after this date are eligible for use in certificated aircraft.

NOTE 6. Engine model Super Pirate D4-83, formerly included in this specification has been deleted due to the fact that no engines of this model are in existence.